APPENDIX B

Data Sources

Death Certificate System

Description of the Data

The Washington State Death Certificate System gathers information about each death that occurs in Washington State. Similar information is collected for residents of Washington State who die in another state or country. Thus, the Death Certificate System contains records on all deaths occurring in the state and all deaths to residents of the state.

Funeral directors collect information about the decedent from an informant (usually a family member or close personal friend of the decedent). Cause-of-death information is generally provided by a certifying physician, medical examiner, or coroner.

The major purposes of the death system are to:

- Provide a death record for purposes such as establishing inheritance and disposition of human remains.
- Record information about causes of death, injuries, occupation, and age which can be used by data analysts to help prolong the lives of residents of Washington State. For more information about what data are collected on the Washington State Death Certificates, visit www.doh.wa.gov/EHSPHL/CHS/CHS-Data/death/deatmain.htm (Washington State Department of Health death certificates Web page).

Classification and coding of data on Washington death records follow the National Center for Health Statistics (NCHS) guidelines as defined in *Vital Statistics Instruction Manuals* parts 1-20 (U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Health Statistics, Hyattsville, MD). From 1980-1998, data was coded using ICD-9 codes, and the data from 1999-2001 was coded using ICD-10 codes. For more information on the International Classification of Disease (ICD) codes used in the death certificates, visit www.doh.wa.gov/ehsphl/chs/chsdata/TechNote/ tech_not.pdf (Washington State Department of Health, death certificates/technical notes Web page).

Use of the Data for this Report

The Death Certificate System was used in every chapter of this report to identify the number of deaths related to childhood injury by cause and intent of injury. The cause and intent of each injury death were classified by either ICD-9 or ICD-10 code using the recommended framework listed in Appendix C.

Washington State Comprehensive Hospital Abstract Reporting System (CHARS)

Description of the Data

The CHARS database is used to collect public information such as the age, sex, zip code, and billed charges of the patient, as well as the codes for their diagnosis and procedures, among other items.

The purpose of the CHARS system is to provide public health personnel, consumers, purchasers, payers, providers, and researchers useful information by which to make informed decisions on health care. For more information, visit the Washington State Department of Health Web site at www.doh.wa.gov/EHSPHL/hospdata/.

Classification and coding of CHARS data also follow the National Center for Health Statistics guidelines as defined in *Vital Statistics Instruction Manuals* parts 1-20 (U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Health Statistics, Hyattsville MD).

Use of the Data for this Report

CHARS data were used in every chapter of this report to identify the number of non-fatal hospitalizations related to childhood injury by cause and intent of injury. The cause and intent of each injury hospitalization were classified by ICD-9 code using the recommended framework listed in Appendix C.

National Emergency Department Data

Description of the Data

The national data are obtained from an expansion of the National Electronic Injury Surveillance System (NEISS) operated by the U.S. Consumer Product Safety Commission (CPSC). The expanded system, called the NEISS All Injury Program (NEISS-AIP), began on July 1, 2000, and collects data about all types and external causes of non-fatal injuries and poisonings treated in U.S. hospital emergency departments (EDs) – whether or not they are associated with consumer products. The NEISS All Injury Program (NEISS-AIP) is a collaborative effort by the National Center for Injury Prevention and Control (NCIPC) and CPSC. For more information about the national data, visit www.cdc.gov/ncipc/wisqars/nonfatal/datasources.htm.

Use of the Data for this Report

Emergency department data was used in every chapter of this report to provide an estimate of the number of injury-related visits to an emergency department among Washington's children. The estimates were based on national rates of emergency department visits applied to Washington's population.

Population Data

Description of the Data

The United States Constitution mandates a count of people living in the country every 10 years to determine how many seats each state will have in the House of Representatives. The census is also used for political redistricting, distribution of federal and state funds, and other governmental needs. The Bureau of the Census, located in the Department of Commerce, develops and mails census questionnaires to all known addresses where people might live, including housing units, hospitals, and hotels, in the United States and its territories.

Information is gathered by a *short form* sent to five out of six housing units and a long form sent to the remaining addresses. The short form asks basic questions, such as name, age, gender, and race of everyone in the household. The *long form* includes the questions on the short form, additional demographic questions, such as income and education, and questions about housing. Census takers visit housing units in rural and remote areas to drop off and pick up forms, and visit housing units that do not return census forms. Census workers also stage a one-day operation to obtain information on homeless persons and others who might be missed in the traditional enumeration of housing units and group quarters.

The primary purpose of intercensal interpolations is to provide a count of people in Washington between the decennial censuses. The Office of Financial Management (OFM) develops the intercensal interpolations using information from the decennial censuses, annual data on the number of births and deaths in Washington, and a variety of other data, such as housing starts, to estimate migration into and out of Washington. Both the federal census counts and the Washington intercensal estimates are also used by many other entities for a diversity of purposes, such as the denominator for calculating rates of health events. For more information about population data, visit www.doh.wa.gov/HWS/doc/appendixB.doc#census.

Use of the Data for this Report

Population data are used in every chapter of this report as the denominator for rate calculations.

Urban and Rural Data

Description of the Data

The urban and rural classifications were developed using a modification of the Rural Urban Commuting Area (RUCA) codes developed by U.S. Health Resources and Services Administration's Federal Office of Rural Health Policy and the U.S. Department of Agriculture's Economic Research Service. In the RUCA system, population size and commuting patterns are used to classify census tracts on a continuum from rural to urban.

In this report, counties were assigned a RUCA code by aggregating the population of census tracts within counties by RUCA code. Counties were classified as urban, suburban, large town rural, and small town rural by dominant RUCA code. Definitions of the four RUCA codes are as follows:

- Urban – Continuously built up areas 50,000 persons or more; these areas correspond to U.S. Bureau of the Census defined Urbanized Areas.
- Suburban – Areas with high commuting relationships with urban core areas.
- Large Town Rural – Towns with populations between 10,000 and 49,999 and surrounding rural areas with high commuting levels to these towns.
- Small Town Rural – Towns with populations below 10,000 and their commuter sheds and other isolated rural areas.

All rural-urban classification systems currently depend on 1990 commuting data. Until the 2000 commuting data are released, there is a potential for misclassification. More information on using rural-urban classification systems is available at www.doh.wa.gov/Data/Guidelines/RuralUrban.htm.

Use of the Data for this Report

Geographic comparisons were used in the introduction and motor vehicle chapter.

Child Death Review (CDR) Data

Description of Data

Washington's CDR data come from reviews submitted as of June 2003 to a state database by local CDR teams operating across the state. CDR is a process by which local communities establish a multi-disciplinary team representing public health, medical providers, law enforcement, school counselors, and other agencies and professions. Each team identifies circumstances leading to such deaths; collects and reports accurate, uniform information; improves interagency communication; and develops strategies to improve child health and safety. From 1998 through June 2003, 29 community-based CDR teams covered the entire state of Washington through contracts with 34 local health jurisdictions. Each contractor convened a multidisciplinary team (5-20 members) that reviewed *unexpected deaths of children from birth to 18 years* residing in that jurisdiction. A standardized data collection tool was used and submitted to the Washington State Department of Health. Unless otherwise noted, CDR data in this report includes unknowns and missing data. More information is available at www.doh.wa.gov/cfh/mch/cahcp/cdr.htm.

Use of the Data for this Report

CDR data was used in all of the cause of injury chapters to provide information related to the circumstances surrounding childhood injury deaths.

Healthy Youth Survey (HYS) 2002

Description of Data

The HYS is a collaborative effort between Washington State's Office of the Superintendent of Public Instruction, the Department of Health, the Department of Social and Health Service's Division of Alcohol and Substance Abuse, and the Office of Community Development. The HYS provides important information about adolescents in Washington. County prevention coordinators, community mobilization coalitions, community public health and safety networks, and others use this information to guide policy and programs that serve youth. The information from the HYS can be used to identify trends in the patterns of behavior over time. The state-level data can be used to compare Washington to other states that do similar surveys and to the nation. In the fall of 2002, students in grades 6, 8, 10, and 12 answered questions about safety and violence, physical activity and diet, alcohol, tobacco and other drug use, and related risk and protective factors. The HYS will next be administered in the fall of 2004. State level data are available at: www3.doh.wa.gov/HYS/.

Use of the Data for this Report

HYS data was used in the chapters on drowning, firearms, bicycle, homicide and assault, suicide, and child abuse and neglect to provide information related to safety and violence.

Behavioral Risk Factor Surveillance System (BRFSS)

Description of Data

This is a national telephone survey of adults ages 18 and older that monitors modifiable risk factors for chronic diseases and other leading causes of death. For more information on the Washington State BRFSS, go to www.doh.wa.gov/EHSPHL/CHS/CHS-Data/brfss/brfss_homepage.htm. For CDC BRFSS information, go to www.cdc.gov/brfss (CDC Behavioral Risk Factor Surveillance System Web site).

Use of the Data for this Report

BRFSS data was used in the chapters on firearms, and child abuse and neglect to provide information related to safety and violence.

Child Protective Services (CPS)

Description of Data

CPS is one of sections of the Division of Children and Family Services (DCFS) of the Washington State Department of Social and Health Services (DSHS). CPS is responsible for protecting children from abuse or neglect. CPS staff is required by law to investigate reports of suspected child abuse or neglect that meet the legal definition of child abuse or neglect. Data included in this report are accepted referral data. "Accepted referral" is a referral to Child Protective Services that passed an initial screening to determine whether investigation is required.

Use of the Data for this Report

CPS data was used in the chapter on child abuse and neglect to estimate the number of accepted referrals from abuse or neglect among children in Washington.

Fatal Accident Reporting System (FARS)

Description of Data

FARS contains data on an annual census of fatal traffic crashes. To be included in FARS, a crash must involve a motor vehicle traveling on a traffic way customarily open to the public, and must result in the death of an occupant of a vehicle or a non-motorist within 30 days of the crash. Data collected by FARS includes details about the crash, the vehicles involved, and the persons (including drivers) involved. For more information about FARS, go to www.wtsc.wa.gov/fars.html.

Use of the Data for this Report

FARS data was used in the chapter on motor vehicle occupants to provide information on the most common causes of fatal accidents and safety restraint use among subpopulations within Washington.